

Growing better Cities

URBAN AGRICULTURE FOR SUSTAINABLE DEVELOPMENT

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Gardening Takes Root in Governador Valadares

A municipal program for urban agriculture in Governador Valadares, Brazil, helps put food on the table in low-income neighbourhoods. Though key proponents may change, the gardening endures, thanks to well-coordinated support from a variety of local actors.

Hilda Ribeiro Alves, an energetic and wiry woman, moves quickly as she shows the different sections of her garden. She ruffles the leaves of bushes as she walks by or pauses to hold a fruit in the palm of her hand. Her grandchildren run around in between the banana trees, lettuce beds, tomato plants, and cornstalks.

Ribeiro Alves was born in the country and finds herself working the earth again, here in the neighbourhood of Santa Helena, overlooking the city of Governador Valadares, in eastern Brazil. Through this activity she has found a way to serve more and better food to her four grandchildren. Vegetables, which were not a big part of the family diet before, are now abundant. “My grandchildren grab a tomato off the branch and eat it,” she says proudly.

She and five other neighbours tend garden on a city lot the size of a tennis court that gradually slopes down to a ravine. The municipality ceded the land to the group for this very purpose. The gardeners consume their produce at will, sell the surplus to neighbours, and reinvest the money earned to buy compost and seeds. The municipal government provides tools, material for fences, free water, training, and advice.

The work of identifying plots of land for agricultural use, the legal mechanism to cede access, and the ongoing support the gardeners receive from municipal staff emanated from a research project in 2003, supported by Canada’s International Development Research Centre (IDRC) and UN-HABITAT. The local government, the Universidade Vale Do Rio Doce (Univale — Doce River Valley university), and

several organizations participated. As a result of this project, urban agriculture was included in municipal by-laws; it became an extension project at Univale and is a priority for many local organizations.

Municipal support

For some time, neighbourhood associations and church groups had been requesting support from the municipality for gardens around individual homes, schools, day cares, and seniors’ homes. In 2001, the authorities, under a new administration, responded by installing water outlets in 12 communal gardens. But it was not until the municipality



Hilda Ribeiro Alves gardens on city land near her home to feed her grandchildren.

IDRC: Louise Guénette



About 50 communal gardens produce chemical-free vegetables and fruits.

became involved in the IDRC-supported research project, that interest in urban agriculture grew into a full appreciation of its potential as a tool to alleviate the effects of poverty and generate income in this city of 230 000 inhabitants.

The IDRC-supported research involved the design and testing of planning tools and policies local governments needed to promote urban agriculture. Rosario, Argentina, and Cienfuegos, Cuba, also became testing grounds in this research effort, which was coordinated out of Quito, by the Urban Management Program of UN-HABITAT.

The project partners in Governador Valadares had a few surprises in store for them. In the initial sweep to find existing information on urban farming, they found a recent Health Department survey that included data on what people were growing in their backyards. They were able to estimate that this urban food production represented about 1.17% of the municipality's economic output, though it received no recognition or support of any kind. This percentage is high when compared to the 2% generated by government-assisted small-scale agricultural production in the municipality's rural areas, which represent 80% of its territory.

Another surprise was the amount of space that was actually available in the city to practice urban agriculture. Researchers used a geographic information system (GIS) — a computerized mapping tool that processes and synthesizes data from maps, aerial views, and databases — to identify vacant plots that were suitable for urban agriculture and found plenty of land to spare. In some neighbourhoods, empty spaces outnumbered occupied and built-on properties.

"It opens your eyes," says Ivana Lovo, a biologist who led the project on behalf of the city and later as a Univale professor. "You drive around with a new perspective. You see vacant land everywhere and wonder if it is a potential site."

The participants in the project, including many neighbourhood associations, also discussed what policies would allow people to grow prosperous gardens on this available land. The municipal government acted on their recommendations in 2004. It reduced property taxes by up to 3% on

lots given over to urban agriculture for a minimum of two years. It exempted people gardening on communal lots from paying for water. A new urban agriculture program began to train gardeners in nonchemical agricultural practices and provide tools and materials. The government also added urban farming to the municipality's master development plan, thus ensuring that the activity would be taken into account in the future.

Social solidarity networks

There are now 47 active communal gardens in Governador Valadares and vegetable plots attached to three schools and two day cares. Univale estimates some 3 500 people benefit from them. The city even incorporated communal gardening in a housing project, Conquista, built in 2003 to give squatters a permanent home.

For Jasira Rodrigues dos Santos, who lives in Conquista, the garden has been a great help. It is the only source of income for herself, her husband, and a daughter with health problems. Whereas she used to make due with beans and rice, she now serves fresh vegetables and can generate some cash from the sale of surplus produce. Without the garden, she says, she would be forced to depend on charity.

The other members of the Conquista garden have agreed to allot Rodrigues dos Santos almost half of the space that has been cleared so far for gardening, in recognition of her more dire circumstances. This kind of social solidarity is a strong component among many of the city's gardeners. Another example can be found at the Bom Pastor day care and community centre, where the eight gardeners who tend the plot behind the centre regularly give their produce to neighbours in need.

Even when they are sold at market prices, the fact that chemical-free vegetables are available in outlying low-income neighbourhoods is a worthwhile service. Nearby stores carry fresh produce irregularly and the bus fare needed to go buy it elsewhere is prohibitive for many.



For Jasira Rodrigues dos Santos and Joseni Maria de Freitas, solidarity is an integral part of urban agriculture.

Weathering change

The supporters of urban agriculture in Governador Valadares were apprehensive when João Domingos Fassarella, the mayor who supported communal gardening, lost his bid for re-election in late 2004 to José Bonifácio Mourão.

Many feared they would lose all of the gains they had won, says José Carlos Miranda, of the Central de Movimentos Populares (popular movements federation). “The new mayor’s policies were focused on private enterprise and the big cattle ranches outside the city,” he explains. This is Mourão’s second term and the Central had not been able to convince him during his first term at city hall, from 1998 to 2000, to support urban agriculture.

With more than 50 gardens now in operation, however, the situation has changed considerably. The activity has taken root in several key organizations in the city. The Catholic Church’s Pastoral da Criança (pastoral organization for children), for example, waves the city-gardening banner in its ongoing struggle to improve children’s nutrition. The Associação das Hortas Comunitárias (AuHcomut — community gardens association) has also emerged in the interim. It represents most of the communal gardeners and intercedes on their behalf. Through AuHcomut, gardeners request tools and materials from the municipality. The association rents a section of an outdoor market on Fridays where the more productive gardeners sell their surplus. As a registered organization, AuHcomut can also make proposals for funding from donors. It has already obtained support from the Banco do Brasil Foundation to build 13 small greenhouses.

The many urban agriculture supporters in Governador Valadares, including AuHcomut, coordinate their efforts in the Forum for Urban Agriculture and Food Security, which grew out of the IDRC-supported research initiative. The project brought these key actors together and when the vacant land research and policy design came to an end in 2003 the partners decided to continue to meet through the forum. With the resources of the member institutions and a state grant, the forum has publicized urban agriculture, produced information materials for the general public, and held citywide meetings with urban gardeners to discuss future directions.

When the government changed hands, the municipality’s participation in the forum was interrupted for a few months. It has now resumed but, many forum participants note, the enthusiasm of local authorities has diminished. AuHcomut Coordinator Afonso Nunes Martins says he has to lobby harder to obtain technical support from the Urban Agriculture Program and transport to bring the produce to the market. Nor does the municipality promote the program the way it used to. “People don’t know about the free water or the discounts on property taxes,” Nunes Martins says.



IDRC: Louise Guénétte

As students learn about horticulture, they grow food to supplement the lunch served at Ivo de Tassis school.

Prize-winning school meals

Gardening is on the curriculum at Ivo de Tassis elementary school and is part of principal Analia Fagundes Felipe’s strategy to improve student nutrition.

Just as the local government in Governador Valadares was identifying, in an IDRC-supported project, where city farming could be done and how it could support it, Fagundes Felipe lobbied the municipality for its help to convert approximately 5 000 square metres of school property into a garden. This schoolyard production now supplements the meals served to the morning, afternoon, and evening shifts of students at Ivo de Tassis.

“Most of the ingredients for the school meals, such as rice, beans, milk, and meat, are bought. But no money is given for vegetables. The garden helps to complete the meals,” Fagundes Felipe explains.

The garden and additional funds from the municipality for a pilot pre-class snack has made Ivo de Tassis a national model. The school’s success prompted Brazil’s federal government program, Fome Zero (Zero Hunger), to award the municipal government a national prize in 2004 for the best school meals.

First graders plant seeds and grow seedlings. Students from Grades five to seven work in the garden during horticulture class. When the harvest is too abundant to use in the school kitchen, the kids take home the surplus.

School meals play a vital role in poor children’s education. “Many children go to school with their mind on food. They don’t pay attention in class; they don’t concentrate,” says Jacqueline Miriam Maciel Junqueira, a member of the Regional Commission on Food and Nutritional Security. Some children who go to Ivo de Tassis, she adds, only get one meal a day, which mostly consists of carbohydrates such as rice, noodles, or yuca.

The local department for Environment, Agriculture and Supplies (SEMA) is proposing to extend the practice of school gardens to all municipal schools.

Newton Ferreira, the municipal Secretary for Environment, Agriculture and Supplies (SEMA), who is responsible for the program, recognizes that city gardens improve the condition of the poorest inhabitants. He says his staff is looking for new sources of funding to support urban agriculture. As well, a SEMA proposal to the mayor recommends involving more municipal departments such as Education, Health, and Public Works, in the Urban Agriculture Program.

The municipality, through the Water and Sewage Service, and Univale are collaborating on a second IDRC-supported research project involving the preservation of water resources and their more efficient use in urban agriculture. The two partners are among nine winners of a small grant for municipal research. They will assess the costs and benefits of installing domestic wastewater treatment, including rainwater collection, in the Conquista housing project, for its use in backyard gardening and other domestic activities.

In it for the long run?

The continuation of urban agriculture in Governador Valadares will depend on the steadfastness of all of the key institutions promoting the activity and the gardeners themselves.

As the movement evolves it faces new challenges such as the need to develop a market for its produce. The demand is there. Hilda Santos da Silva who gardens behind the Santo Antonio Health Centre says her neighbours fetch her in her home, when they can't find her in the vegetable plot, to buy her fresh-picked produce. When rain is abundant, Santos da Silva, and the six other gardeners she has teamed up with, harvest six large baskets of lettuce every week, which they have no trouble selling. But dry spells slow production considerably. If they could only streamline their production, they would be able to provide the market with a constant and varied selection of produce. They could supply restaurants and start canning some of their crops, for a greater profit, says Nunes Martins.

Governador Valadares has a pool of trained urban farmers on hand and many are willing to make the jump from sustenance to commercial farming. They have taken a liking to growing food. They will stick to it as long as well-coordinated support continues to make it a viable option.

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